

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



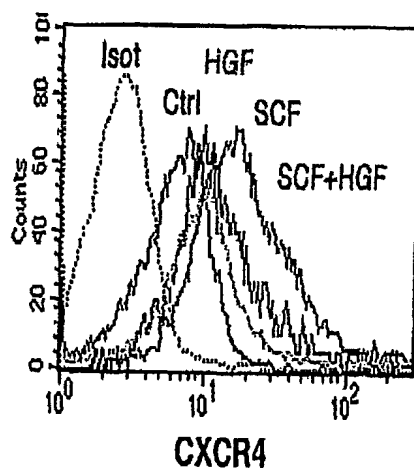
(43) International Publication Date  
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number  
**WO 2004/090121 A2**

- (51) International Patent Classification<sup>7</sup>: C12N 5/06, (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/IL2004/000315
- (22) International Filing Date: 7 April 2004 (07.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
155303 8 April 2003 (08.04.2003) IL  
159307 10 December 2003 (10.12.2003) IL
- (71) Applicant (*for all designated States except US*): YEDA RESEARCH AND DEVELOPMENT CO. LTD [IL/IL]; Weizmann Institute of Science, P.O.Box 95, Israel, 76100 Rehovot (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): KOLLET, Orit [IL/IL]; 14 Ramat Chen St., 52232 Ramat Gan (IL). LAPIDOT, Tsvee [IL/IL]; 6 Boxer St., 74046 Ness Ziona (IL).
- (74) Agent: EINAV, Henry; Inter-Lab Ltd., Science Based Industrial Park, Kiryat Weizmann, 76110 Ness Ziona (IL).
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: STEM CELLS HAVING INCREASED SENSITIVITY TO A CHEMOATTRACTANT AND METHODS OF GENERATING AND USING SAME



(57) Abstract: The present invention relates to stem cells which exhibit increased sensitivity to a chemoattractant and, more particularly, to methods of generating and using them such as in clinical applications involving stem cell transplantation.